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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/719,423	11/21/2003	Eric R. Hansen	204560-73806 3387	
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BARMES & THORNBURG			LU, JIPING	
11 South Meridian Street Indianapolis, IN 46204			ART UNIT	PAPER NUMBER
			3749	
		DATE MAILED: 06/03/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    10/719,423		Application No.	Applicant(s)	1111				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address teriod for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  B SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  If the period for reply specified above is less than thirty (39 days, a reply white the estationy information of thing (00) days will be considered timely.  If the period for reply is specified above is less than thirty (39 days, a reply white the estationy information of thing (00) days will be considered timely.  If the period for reply is appendix only the period of the station of the period for reply is appendix of the station of the period for reply is appendix of the station of the station of the station of the period for reply specified above is less than the morths of the station of the				)V V \				
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1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-34 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-34 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to by the Examiner. 10) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1 Certified copies of the priority documents have been received. 2 Certified copies of the priority documents have been received in Application No 3 Copies of the certified copies of the priority documents have been received.  Aktachment(s) 1) All Notice of References Cited (PTO-892) 2) Moltica of Draftspersons Patent Drawing Review (PTO-948) 2) Moltica of Draftspersons Patent Drawing Review (PTO-948) 2) Moltica of Draftspersons Patent Drawing Review (PTO-948) 3) Moltice of Information Patent Application (PTO-152)	THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing	66(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timel the mailing date of this c D (35 U.S.C.§ 133).	y. ommunication.				
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3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  *Attachment(s)    Notice of References Cited (PTO-892)								
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* See the attached detailed Office action for a list of the certified copies not received.  *Attachment(s)    Notice of References Cited (PTO-892)	•		ed in this National	Stage				
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7) Notice of Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)	1) Notice of References Cited (PTO-892)							
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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 26-28, 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Branvold (U.S.Pat. 3,584,850).

Brandvold shows a mineral lime (CaO) processing inclined rotary kiln 12 with a lower combustion air end 14b and an upper material feed end 14a, 18, 20d. An air inlet opening 24e is located between two ends. A preheater or precalcining assembly 14 is positioned at the upper end 18. A stationary hood 14k is positioned proximate to the combustion air inlet lower end 14b and a burner 16a is proximate to the combustion air inlet lower end 14b.

3. Claims 26-28, 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Tutt et al (U. S. Pat. 5,375,535).

Tutt shows a mineral lime (CaO) processing inclined rotary kiln 16, 24 with a lower combustion air end 30 and an upper material feed end 12, 20. An air inlet opening 50, 56 is located between two ends. A preheater or precalcining assembly (at 19, 52) is positioned at the upper end 12, 20. A stationary hood 32 is positioned proximate to the combustion air inlet lower end 34 and a burner 33 is proximate to the combustion air inlet lower end 34.

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## Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 1-25, 29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Branvold (U.S.Pat. 3,584,850).

Brandvold shows a mineral lime (CaO) processing inclined rotary kiln 12 with a lower combustion air end 14b and an upper material feed end 14a, 18, 20d. An air inlet opening 24e is located between two ends. A preheater or precalcining assembly 14 is positioned at the upper end 18. A stationary hood 14k is positioned proximate to the combustion air inlet lower end 14b and a burner 16a is proximate to the combustion air inlet lower end 14b. To operate the combustion rate at sub-stoichmetric ratio at the lower end and super-stoichmetric at the upper end is merely an obvious matter of fuel and air adjustment. By the controls 32, 34, 36, 24 in

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order to obtain a complete combustion for clean air exhaust. This is well known practice in the combustion art.

7. Claims 1-25, 29 and 34 are rejected under 103 over anticipated by Tutt et al (U. S. Pat. 5,375,535).

Tutt shows a mineral lime (CaO) processing inclined rotary kiln 16, 24 with a lower combustion air end 30 and an upper material feed end 12, 20. An air inlet opening 50, 56 is located between two ends. A preheater or precalcining assembly (at 19, 52) is positioned at the upper end 12, 20. A stationary hood 32 is positioned proximate to the combustion air inlet lower end 34 and a burner 33 is proximate to the combustion air inlet lower end 34. To operate the combustion rate at sub-stoichmetric ratio at the lower end and super-stoichmetric at the upper end is merely an obvious matter of fuel and air adjustment in order to obtain a complete combustion for clean air exhaust. This is well known practice in the combustion art.

#### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 703-308-2354. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jiping Du

Primary Examiner Art Unit 3749 Page 5

J.L.